



OPERATION & MAINTENANCE MANUAL

Allflow Vortex Pump Chamber





OPERATION & MAINTENANCE MANUAL ALLFLOW VORTEX PUMP CHAMBER

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Section 1

GENERAL SPECIFICATIONS PUMP CHAMBER DETAILS



ALLFLOW VORTEX PUMP CHAMBER

General Specifications & System Components

Each Allflow Vortex Pump Chamber is supplied as a fully integrated, pre-assembled packaged system engineered for reliable wastewater collection and transport

Holding Tank Dimensions

The system features a heavy-duty, rotationally-moulded polyethylene holding tank equipped with a secure, matching lid.

PC75-V: 580mm L x 380mm W x 440mm H Total volume 97L, working volume 66L, reserve volume 31L

PC270-V: 710mm in diameter x 850mm H Total volume 300L, working volume 135L, reserve volume 165L

PC600-V: 890mm in diameter x 1080mm H Total volume 670L, working volume 250L, reserve volume 420L

PC1300-V: 1330mm in diameter x 1190mm H Total volume 1400L, working volume 555L, reserve volume 845L

PC2100-V: 1330mm in diameter x 1700mm H Total volume 2360L, working volume 555L, reserve volume 1805L

PC3500-V: 1920mm in diameter x 1520mm H Total volume 4400L, working volume 1160L, reserve volume 3240L

Pump, Pipework & Valves

PC75-V Model: The pump in this model is the DA-D7VX

The pump pipework and fittings are in 40mm PVC pressure pipe. A 40mm brass non-return valve and a quick-release coupling are supplied in the pipework. Outlet is 40mm female BSP.

PC270-V, PC600-V, PC1300-V, PC2100-V, & PC3500-V Models: The pump in these models is the DA-D10VX

The pump pipework and fittings are in 50mm PVC pressure pipe. A 50mm brass non-return valve, an isolation valve and a quick-release coupling are supplied in the pipework. Outlet is 50mm female BSP.

Electrical Components

The pump chamber comes pre-wired ready for connection to power. A standard 3-pin electrical plug will be needed to connect the pump to power, or the pump can be hardwired directly into a dedicated electrical supply by an registered electrician.

High Level Alarm includes:

A wall-mounted IP54 polycarbonate control box c/w 1m flex and 3-pin plug. The control box has a display screen, red flashing alarm light, buzzer, and also a mute switch on the front cover.



PRODUCER STATEMENT

ALLFLOW PUMP CHAMBERS

Pump Chamber / Holding Tank Integrity

All polyethylene wet wells are manufactured using high-grade, rotationally moulded virgin materials. The structures feature integrated circumferential reinforcing ribs designed to withstand both internal hydrostatic pressure and external earth/hydraulic pressures encountered in buried installations, with an intended design life of 50+ years

Internal Pumps, Pipework & Valves

Submersible pump units are sourced from leading global manufacturers operating under certified ISO 9001 Quality Management Systems to meet rigorous engineering specifications. All internal valves, pipework, and structural fittings consist of premium, brand-new materials tailored to strict engineering requirements.

Regulatory Compliance: All isolation and non-return valves conform entirely to current AS/NZS Standards.

Workmanship: Assembly and internal plumbing are executed strictly by qualified and experienced tradespeople

Manufacturing & Assembly Control

To maintain strict quality control, all fabrication, component assembly, pre-wiring, and panel construction are performed entirely on Allflow premises by qualified, in-house technical staff

Electrical Controls & Systems

All integrated electrical components, control panels, and alarm units comply fully with corresponding AS/NZS Electrical Standards

Warranty, Documentation & Handover

Every packaged pump station is supplied with a comprehensive operational manual containing step-by-step installation procedures, electrical wiring schematics, and commissioning checklists. Allflow provides a comprehensive 24-month warranty from the date of supply, covering all components, electrical controls, pipework, and fittings against defective equipment, materials, or workmanship



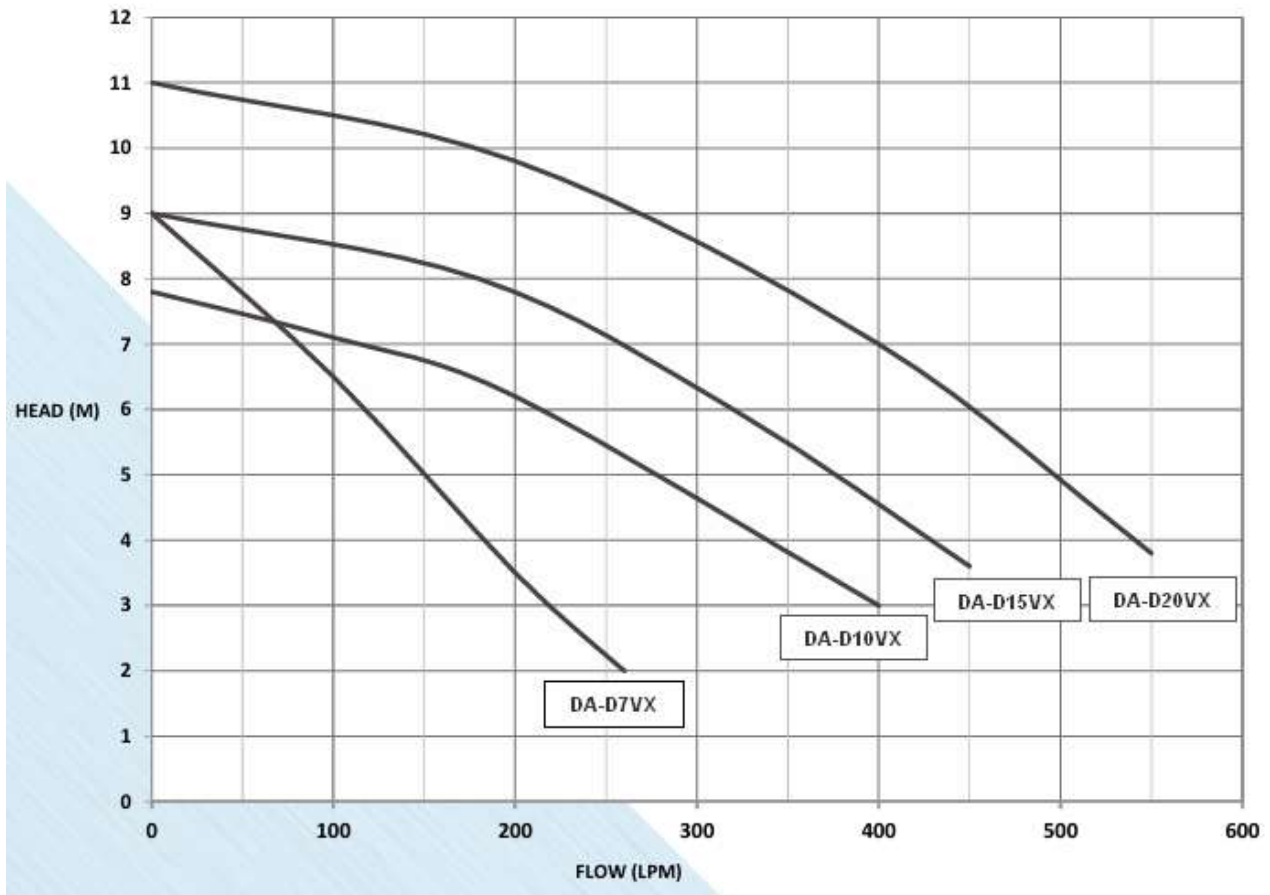
Section 2

PUMP DATA



DA SERIES VORTEX SUBMERSIBLE PUMPS

Performance:



DA SERIES SUBMERSIBLE VORTEX PUMPS

Part No.	HP	kW	Phase	Voltz	Float Switch	Amps	Outlet	Code
DA-D7VX	0.75	0.55	1	230	Yes	3.9	40mm	D
DA-D10VX	1.0	0.75	1	230	Yes	5.3	50mm	D
DA-D10VXT	1.0	0.75	3	400	No	2.1	50mm	D
DA-D15VX	1.5	1.1	1	230	Yes	7.2	50mm	D
DA-D15VXT	1.5	1.1	3	400	No	2.5	50mm	D
DA-D20VXT	2.0	1.5	3	400	No	3.3	50mm	D



Section 3

PLUMBING INSTRUCTIONS & INSTALLATION PROCEDURE

Allflow Pump Chamber Plumbing Instructions & Installation Procedure

IMPORTANT: Please read all instructions before commencing installation.

ALL WORK MUST BE CARRIED OUT BY A REGISTERED PLUMBER / DRAINLAYER AND MUST COMPLY WITH THE PLUMBING REGULATIONS AND CODES OF PRACTICE.

GENERAL INSTALLATION GUIDELINES

Allflow Pump Chambers are all pre-assembled and ready for installation and require no adjustments. We recommend that certain minimum guidelines are adhered to as follows: -

1. All units must be vented as above.
2. All plumbing must be carried out by a Registered Craftsman Plumber, and must comply with Plumbing Regulations and Codes of Practice.
3. All electrical permanent connections must be done by a Registered Electrician, and must comply with the Electricity Regulations and Codes of Practice.
4. All installation should be done in accordance with the Local Authority's guidelines and permit requirements.
5. No acids, solvents, corrosives, chemicals or inflammable liquids should be allowed into the unit, as it could cause serious problems.
6. The maximum water temperature permitted into the unit is 60°C constant.



1. POSITION

Position unit in a clean, dry, flat, non-floodable position, i.e. under sink or in ground near the fixture to be pumped. Decide which way around to install unit i.e. drain inlet and pump discharge on left or right-hand side of chamber.

2. WASTE

- (a) Using a hole saw, cut a hole on selected side of chamber wall near top of tank (allow clearance for lid rebate).
- (b) (Refer to uniseal chart for correct hole saw size). Install uniseal on outside of tank.
- (c) Connect and run correct size wastepipe from the fixture(s) trap into the uniseal and through side of tank. Install PVC 90° bend to direct flow down.
- (d) All fixture(s) running into the pump station must be trapped to avoid any odours from entering into room.

3. DISCHARGE

- (a) Connect up and run the pump discharge pipework from the female BSP outlet connector on unit and run to the desired position (sewer connection or onsite sewer pipe). Do not connect up the discharge line to a gully trap, or vent pipe.
- (b) A 50mm or 63mm MD pipeline is recommended for the pump discharge line. A 40mm or 50mm LD pipe can also be considered if there is no traffic to be around the pipe line.

4. VENT

- (a) The tank must be vented.
- (b) Using the Uniseal already provided, connect and run a 32mm DWV vent pipe from the Uniseal to a suitable position onsite.
- (c) Run the vent to an external position above any known flood levels.

IMPORTANT NOTE

**AIR ADMITTANCE VALVES MUST NOT BE USED ON AN ALLFLOW PUMP CHAMBER AT ANY TIME.
ALL VENTS MUST BE OPEN TO ATMOSPHERE.**

DO NOT WALK ON THE TOP OF THE PUMP CHAMBER, OR DRIVE ANY VEHICLES WITHIN 2MTRS OF THIS CHAMBER. Please contact us as below if any concern of floatation or other installation concerns.



5. BACKFILL

- (a) Once the pump chamber is installed into the hole, please ensure that the pump chamber is completely filled with water. Once the chamber is full with water, backfill around the chamber with clean light material. Do not use rocks, stony material or heavy clay. If dirt is used, this will need to be compacted in layers to prevent any slumping over time.

6. COMMISSIONING

- (a) Check that all plumbing connections are tight (incl rubber Plumbquik clamps, if used)
- (b) Ensure the pump has not moved in transit, and the ball float is free to move without touching the pump chamber walls.
- (c) Remove the transport support from inside the chamber.
- (d) Place lid on unit and tighten so that lid is fully sealed onto the unit, to ensure no unauthorised entry.
- (e) An electrician will be needed to connect this pump to 230V mains power.
- (f) Once connected to mains power, plug in and switch on.
- (g) Run cold water from waste fixture until pump cuts in, empties tank, and shuts off.

Your fully automatic Pump Chamber installation should now be complete.



Section 4

MAINTENANCE SCHEDULE

MAINTENANCE SCHEDULE

- No regular maintenance is needed, unless in a commercial application.
- In high grease applications, tank should be degreased on a regular basis by a waste removal contractor. The pump to be removed and checked on approximately a 12 monthly cycle, as per pump instructions.

Below is a short list of things that is allowed to enter the pump chamber:

- Human waste
- Toilet paper

Below is a list of things that cannot enter the pump chamber:

- Wet wipes (even ones labelled “flushable”)
- Baby wipes, makeup wipes
- Paper towels, tissues, napkins
- Feminine hygiene products (tampons, pads)
- Hair, dental floss, nail clippings
- Condoms
- Pet waste
- Cooking oils, fats, grease (down sinks) — major cause of fatbergs
- Food scraps, coffee grounds, tea leaves

If you have any questions or problems, please call Allflow on 035439057



Section 5

ELECTRICAL WIRING INSTRUCTIONS

ELECTRICAL WIRING INSTRUCTIONS

ALLFLOW PUMP CHAMBER WITH SINGLE PHASE PUMP

- **All units with alarms will require onsite work to be done by a registered electrician and must comply with the electricity regulations and codes of practice.**
- 1. Pump lead wire is supplied as a bare wire, fitted through the cable gland on the pump chamber so fit pump lead wire with a 3-pin plug and plug in pump to 10A 3 pin socket or hardwire as required.
- 2. Alarm control box needs to be attached to either a post on site, or side of a building, and the power supply plugged into a 10A 3 pin socket or hardwire as required.
- 3. Check correct setting of overload circuit breaker relay to match the pump running current to ensure pump does not trip the circuit breaker.
- 4. Check operation of the pump (starting & stopping)
- 5. Check operation of the alarm by lifting up the alarm float.

Your fully automatic Pump Chamber installation should now be complete.